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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/675,497	09/30/2003	Mark S. Ortiz	END5135-0516315	4657

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EXAMINER
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POUS, NATALIE R

ART UNIT	PAPER NUMBER
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3731

DATE MAILED: 12/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/675,497	Applicant(s) ORTIZ ET AL.	
	Examiner Natalie Pous	Art Unit 3731	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 25 September 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1,3-11,13,15-20 and 22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3,5-9,11,13,15-19,22 is/are rejected.
- 7) ☒ Claim(s) 4,8-10 and 20 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>6/22/05</u>   | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Response to Arguments/Remarks***

#### **Regarding the 112 rejections**

Applicant's arguments, see pages 10-12, filed 9/25/06, with respect to the rejection(s) of claim(s) 7 under 35 USC 112 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Kulkashi.

Applicant's arguments, see pages 10-12, filed 9/25/06, with respect to 35 USC 112 rejection of claim 15 have been fully considered and are persuasive. The 35 USC 112 rejection of claim 15 has been withdrawn.

#### **Regarding the Suyker Reference**

Applicant's arguments filed 9/25/06 regarding the 35 USC 102 rejection of claim 13 with respect to Suyker have been fully considered but they are not persuasive. Applicant asserts that Suyker does not teach wherein half actuating allows tissue positioning (page 13 of the remarks, lines 12-17). First, examiner points out that this limitation is not required by claim 13, and in order to anticipate, a reference must only meet the limitations of the claim language. Thus, this argument is moot. Further, with regards to the amended language of claim 13, examiner asserts that the first and second controls (proximal end of shaft 58, and proximal end of shank 13) are in fact independently actuable as the user may either push proximal end of shaft 58 or pull

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proximal end of shank 13. Thus, the previous rejections of claims 13 and 15 with respect to Suyker are sustained.

Applicant's arguments filed 9/25/06 regarding the 35 USC 102/103 rejection of claim 1 with respect to Suyker have been fully considered but they are not persuasive. Applicant argues that the claim as amended clarifies the actuation of a woven cylindrical tube to a rivet shape. Examiner asserts that this limitation is a functional limitation, and that the applier of Suyker is capable of actuating a woven cylindrical tube to a rivet shape, as it meets all structural limitations of the claim that would enable an applier to perform said function, as recited by the applicant. Applicant further argues that Suyker does not teach engaging surfaces capable of positioning outer loops. Examiner respectfully disagrees. The ends of leaves 61 are engaging surfaces that may position outer loops of a cylindrical anastomosis device. Thus, the previous rejection of claim 1 with respect to Suyker is sustained.

#### **Regarding the 35 USC 103 rejections**

Applicant's arguments filed 9/25/06 regarding the 35 USC 103 rejection of claim 3 with respect to the combination of Suyker and Kim have been fully considered but they are not persuasive. In response to applicant's argument that the purpose of the limitation of claim 3 is to recite further structure for independently actuating either longitudinal set of cantilevered petals. The fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985). Examiner

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asserts that in order to meet the limitations of an apparatus claim, there must be sufficient motivation to combine references, not necessarily the same motivation as anticipated by the applicant. Thus, there is sufficient motivation to combine the Suyker and Kim to anticipate the limitations of claim 3 as described in the previous office action.

Applicant's arguments see page 14, filed 9/25/06, with respect to claim 4 have been fully considered and are persuasive. The 35 USC 103(a) of Claim 4 has been withdrawn.

Applicant's arguments see page 14, filed 9/25/06, with respect to claims 8, 9, 10 and 20 have been fully considered and are persuasive. The 35 USC 103(a) rejections of Claims 8, 9, 10 and 20 have been withdrawn.

Examiner notes that there are no remarks with regards to claims 5, 6, 11, 17, 18 and 19; and thus examiner assumes that applicant agrees with the previous 103(a) rejection of claims 5, 6, 11, 17, 18 and 19 with respect to the combination of Suyker and Kim, and the combination of Suyker, Kim and Yeatman. The rejections are thus sustained.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 22 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 22 recites the limitation "the ring" in line 1. There is

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insufficient antecedent basis for this limitation in the claim. It is noted that the recitation of an anastomosis ring in claim 1 is a functional limitation, and thus is not positively claimed and is not proper antecedent basis.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claim 13 rejected under 35 U.S.C. 102(e) as being anticipated by Suyker (US 6485496).

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Regarding Claim 13, Suyker teaches a surgical instrument, comprising: a cannula (58); an actuating member (59) distally and laterally presented on the cannula for receiving a generally cylindrical anastomosis ring (1) and formed of radially spaced proximal leaves (61) which each distal leaf outwardly actuates by a cantilevered, hinged relationship to a central portion of the actuating member (59); a first control (proximal end of cannula 58) operative to compress a longitudinal end of the actuating member toward a center of the actuating member to actuate a respective portion of the received anastomosis ring; a second control (proximal end of shank 13) to compress another longitudinal end (60) of the actuating member toward the center of the actuating member to actuate the other respective portion of the received anastomosis ring forming a hollow rivet shape (Column 8, proximal lines 57-64); wherein the first and second controls are capable of being independently actuatable to allow independent actuation of either longitudinal end of the actuating member.

Regarding Claim 15, Suyker teaches the surgical instrument of claim 13, further comprising a stationary member (57) mechanically grounding the center of the actuating member relative to the first cannula.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claim 1 rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as an obvious matter of design choice.

Regarding Claim 1, Suyker (see embodiment of figs. 37-40) teaches a surgical instrument capable of implanting an anastomotic ring device comprising a woven tube of wire having outer loops or ends which thermally deform and evert when inserted into walls of two adjacent lumens at a luminal interface of an anastomotic site, the ends of the tube everting to form petals in a manner which holds the luminal interface of the anastomotic site into apposition, comprising: an actuating member (14) formed of a plurality of proximal leaves (61) and a plurality of distal leaves (61, see fig. 38) which each leaf outwardly actuate by a cantilevered hinged relationship to a central portion (59, 60) of the actuating member, configured to receive an anastomotic ring (1) and moveable between a cylindrical, unactuated position (Fig. 7) and a hollow rivet forming shape (Fig. 11) in response to a compressive actuating force; a plurality of distal engaging surfaces (ends of petals 61 not connected to cannula) each formed on a respective distal leaf spaced away from the central portion and positioned to engage a



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selected outer loop of a distal portion of the unactuated, cylindrical anastomotic ring for pulling the engaged outer loop proximally and outwardly during actuation; a plurality of proximal engaging surfaces (ends of petals 61 not connected to cannula) each formed on a respective proximal leaf spaced away from the central portion and positioned to engage a selected outer loop of a proximal portion of the unactuated, cylindrical anastomotic ring for pulling the engaged outer loop distally and outwardly during actuation; a handle including an actuation mechanism for producing the compressive actuating force (Column 5, proximate lines 15-19, it is noted that although a handle is not explicitly recited for the embodiment of figs. 37-40, it is inherent that a handle connected to the shank and the sleeve is present to actuate the device, otherwise it would be obvious to one of ordinary skill in the art at the time the invention was made to provide a handle for actuating the device since it is well known in the art to provide a handle on the non-working end of a device for actuation); an elongate cannula (58) configured to position the distal leaves on a distal side of an anastomotic opening and to position the proximal leaves on a proximal side of the anastomotic opening, and configured to transfer the compressive actuating force from the handle to the actuating member wherein the handle is further operably configured to produce the compressive actuating force by producing a proximally directed longitudinal motion and a distally directed longitudinal motion (fig. 37 to fig. 38), the device operably configured to separately transfer the proximally and distally directed longitudinal motions respectively to distal and proximal portions of the actuating member to pivot corresponding distal

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and proximal leaves toward each other to actuate the anastomotic ring device from a cylinder shape to a hollow rivet shape (Column 8, proximal lines 57-64).

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Suyker in view of Kim (US 5797920). Suyker teaches all limitations of claim 1, and further teaches wherein the cannula comprises a first tube (58) connected to the proximal portion of the actuating member (59), and a second member (13) slidingly received in the tube and connected to the distal portion of the actuating member (60)

Suyker fails to teach wherein the second member is a tube. Kim teaches an anastomosis device wherein the inner member connected to the distal actuating member (124) is a tube in order to insert tools for controllably expanding or contracting the size of the distal end of the device. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Suyker with a tube configuration as taught by Kim in order to insert tools for controllably expanding or contracting the size of the distal end of the device.

Claims 5, 6 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suyker in view of Kim (US 5797920).

Suyker teaches all limitations of preceding dependent claims 1 and 13, but fails to teach wherein the device comprises an enterotomy creation tip distally coupled to the actuating member. Kim teaches wherein the distal end of the device comprises an enterotomy creation piercing tip (130) in order to create an insertion opening for the anastomosis ring and deploy the ring with the same device. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the distal

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end of Suyker with a enterotomy creation piercing tip as taught by Kim in order to create an insertion opening for the anastomosis ring and deploy the ring with the same device.

Claims 11, 17, 18 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Suyker and Kim and further in view of Yeatman (US 6451029) and further as a matter of design choice.

The combination of Suyker and Kim teaches all aspects of preceding dependent claims 1, 5, 6 and 13 as previously described, but fails to disclose wherein the instrument comprises a pneumatic conduit communicating between the distal tip and the handle for inflating a body lumen, and the tip comprising a veress needle. Yeatman teaches an intestinal stapling device wherein a pneumatic conduit (26) is in communication with the distal tip and handle (30) in order to provide a means of leak testing and performing anastomosis with a common instrument. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Suyker and Kim with a pneumatic conduit communicating between the distal tip and the handle for inflating a body lumen as taught by Yeatman in order to provide a means of leak testing and performing anastomosis with a common instrument.

Regarding the limitation wherein the piercing tip comprises a veress needle, it is noted that a veress needle is one that serves to insufflate a body cavity for a laparoscopic procedure. It is further noted that the combination of Suyker, Kim and Yeatman as described above fulfills that description, and therefore fulfills the structure and function of a veress needle.

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Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Suyker and Kim as applied to claim 6 above, and further in view of Kulkashi et al. (US 5098388). The combination of Suyker and Kim teaches all limitations of preceding dependent claims 1 and 6 as previously described, but fails to teach wherein the piercing tip comprises a veress needle having a syringe knife tip within which a ball translates and springedly withdraws into the Veress needle to expose the piercing surfaces. Kulkashi teaches a veress needle having a syringe knife tip in which a ball translates and springedly withdraws into the Veress needle in order to provide a piercing tip that minimizes the risk of contaminants being carried by gas into the abdominal cavity. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Suyker and Kim with a syringe knife tip in which a ball translates and springedly withdraws into the Veress needle as taught by Kulkashi in order to provide a piercing tip that minimizes the risk of contaminants being carried by gas into the abdominal cavity.

Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Suyker in view of Park et al. (US 2003/0032967). Suyker teaches all limitations of preceding dependent claim 1 as previously described, but fails to teach wherein the anastomosis ring comprises a woven tube of wire having outer loops or ends which thermally deform and evert when inserted into walls of two adjacent lumens at a luminal interface of an anastomotic site, the ends of the tube everting to form petals in a manner which holds the luminal interface of the anastomotic site into apposition. Park teaches an anastomosis ring (10) comprising a woven tube of wire (18) having outer loops or ends

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(20') which thermally deform and evert when inserted into walls of two adjacent lumens at a luminal interface of an anastomotic site (fig. 1), the ends of the tube everting to form petals in a manner which holds the luminal interface of the anastomotic site into apposition (fig. 4) in order to reduce the need for mechanical compression of the anastomosis ring. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Suyker with the anastomosis ring of Park in order to reduce the need for mechanical compression of the anastomosis ring.

#### ***Allowable Subject Matter***

Claims 4, 8, 9, 10 and 20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Natalie Pous whose telephone number is (571) 272-6140. The examiner can normally be reached on Monday-Friday 8:00am-5:30pm, off every 2nd Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anhtuan Nguyen can be reached on (571) 272-4963. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

NRP  
11/15/06

  
**ANH TUAN T. NGUYEN**  
**SUPERVISORY PATENT EXAMINER**

11/20/06.